CLAIM REJECTIONS – 35 U.S.C. §102 Rejections

Claims 1-21, 25-28, 31-35, and 39-43, which rejections are traversed.

Claims 7 and 16 have been amended. With regards to claims 7 and 16, L, R', R" are required components of the respective claims and add limitations to the respective claims from which they depend. Bosch does not disclose the limitations of claims 7 and 16 in combination with " a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings" of claim 1. To anticipate a claim, a single source must contain all of the elements of the claim. *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986); *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569, 1574, 224 U.S.P.Q. 409, 411 (Fed. Cir. 1984); *In re Marshall*, 578 F.2d 301, 304, 198 U.S.P.Q. 344, 346 (C.C.P.A. 1978).

Bosch does not disclose a buffer layer in combination with " a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings" of claim 10. A single source reference must disclose all of the claimed elements "arranged as in the claim", in order to anticipate the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *Connell v. Sears Roebuck & Co.*, 722 F.2d 1542, 1548, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

Regarding claims 27 and 28, Bosch does not disclose, in combination, the indium tin oxide and low work function metal of claim 27 or the low work function metals of claim 28 in combination with " a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings". With regards to claims 32 and 33, Bosch does not disclose a cathode comprised of lithium, magnesium, or aluminum in combination with "a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings.

Bosch does not disclose all of the claim elements of claims 27 and 28 and therefore cannot anticipate claims 27 and 28. Similarly, Bosch does not contain all of the elements of claims 32 and 33.

CLAIM REJECTIONS – 35 U.S.C. §103 Rejections

Claims 29, 30, 36, and 37 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bosch (WO 98/04007)which rejection are traversed.

The Examiner has not established a prima facie case of obviousness with respect to the Bosch reference. Bosch does not disclose an aromatic which contains at least two conjugate-linked or two fused aromatic rings. Bosch does not disclose a buffer layer containing the constituents of claim 30. Further, Bosch does not disclose the buffer layer of claim 36 or the stilbene derivative of claim 37 in combination with "a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings" as discussed in previous paragraphs.

The motivation to modify the prior art must flow from some teaching in the art that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention. Bosch does not contain any suggestion to modify the Bosch invention in order to arrive at the applicants' invention. For example, Bosch provides no motivation for including a monovalent aromatic group or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings. No incentive is found in Bosch to combine a monovalent aromatic group or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings with a buffer layer, a stilbene derivative, or a cathode comprised of a low work function metal.

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching,

F.2d 686, 688, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987); *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d 1397, 1399 (Fed. Cir. 1989) ("[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification") (quoting *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984)); *Sentex Systems, Inc. v. Elite Access Systems, Inc.*, 1999 U.S. App. LEXIS 3846 at *17 (unpublished) ("to invalidate claimed subject matter for obviousness, the combined teachings of the prior art references must suggest, expressly or by implication, the improvements embodied by the invention.").

The application and claims are believed to be in a condition for allowance in their present form and which allowance is respectfully requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby authorized to call Robert Thompson, at Telephone Number 585-423-2050, Rochester, New York.

Application No. 09/489,144

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

Respectfully submitted,

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R-T/pn
December 10, 2001
Xerox Corporation
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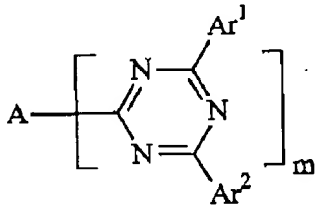
Application No. 09/489,144

VERSION WITH MARKINGS TO SHOW CHANGES MADE:

IN THE CLAIMS:

1. (Amended) An electroluminescent device comprised of an anode and a cathode, and situated therebetween said anode and said cathode at least one electron transport layer comprised of a triazine of the formula



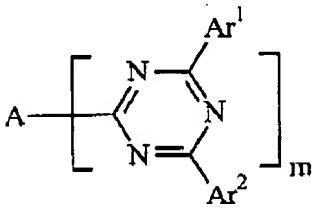
(I)

wherein A is a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings; Ar^1 and Ar^2 are each independently aryl or aliphatic; and m represents the number of repeating segments and further containing a light emitting layer situated between the hole transport layer and the electron transport layer wherein the light emitting layer contains a fluorescent dye selected from the group consisting of coumarins, quinacridones, and aromatic hydrocarbon fluorescent dyes and wherein said fluorescent dye is present in an amount of from about 10^{-3} to about 10 mole percent based on the moles of said light emitting layer material.

12. (Amended) An electroluminescent device in accordance with **claim 10** [which contains] wherein A is an aromatic group which comprises a biphenyl, a naphthyl or a terphenyl; Ar^1 and Ar^2 are each independently an aryl group selected from the group consisting of a phenyl, a biphenylyl, a naphthyl, and a stilbenyl; wherein said aryl group optionally further contains a substituent selected from the group consisting of hydrogen, an alkyl group, an alkoxy group, a halogen, and a cyano group.

Claims 20-24 have been cancelled.

29. (Amended) An organic electroluminescent device comprising in the following sequence an anode comprised of indium tin oxide in a thickness of from about [1] 90 to about 500 nanometers, an optional buffer layer comprised of a phthalocyanine or a stabilized tertiary aromatic amine and which buffer layer is of a thickness of from about [5] 90 to about 300 nanometers, a hole transport layer comprised of a tertiary aromatic amine and which layer is of a thickness of about [1] 90 to about 200 nanometers, a triazine electron transport layer of a thickness of from about 5 to about 300 nanometers, and a cathode comprised of a low work function metal and which cathode is of a thickness of from about 10 to about 800 nanometers and wherein said triazine is of the formula



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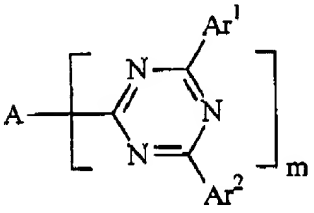
wherein A is aromatic which contains at least two conjugate-linked or two fused aromatic rings; Ar^1 and Ar^2 are each independently aryl or aliphatic; and m represents the number of repeating segments and further containing a light emitting layer situated between the hole transport layer and the electron transport layer wherein the light emitting layer contains a fluorescent dye selected from the group consisting of coumarins, quinacridones, and aromatic hydrocarbon fluorescent dyes and wherein said fluorescent dye is present in an amount of from about 10^{-3} to about 10 mole percent based on the moles of said light emitting layer material.

30. (Amended) An organic electroluminescent device in accordance with **claim 29** wherein said anode is of a thickness of from about [30] 90 to about 100 nanometers, said buffer layer is present and is comprised of a phthalocyanine or a stabilized tertiary aromatic amine and which layer is of a thickness of from about [10] 90 to about 200 nanometers, a light emitting layer in contact with said hole transport layer and comprised of an 8-hydroxyquinoline metal chelate or a stilbene derivative and which layer is of a thickness of from about 1 to about 500 nanometers.

31. (Amended) An organic electroluminescent device comprised of an anode, an organic luminescent medium, and a cathode, wherein the organic luminescent medium contains a triazine layer in contact with the cathode, which layer is comprised of the triazine compounds of Formula (I), and wherein said triazine functions as an electron transport, an electron injector, or simultaneously as an electron transport and an electron injector

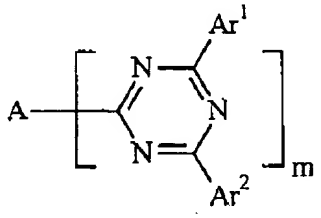


(I)

wherein A is a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings; Ar^1 and Ar^2 are each independently aryl or aliphatic; and m represents the number of repeating segments and further containing a light emitting layer situated between the hole transport layer and the electron transport layer wherein the light emitting layer contains a fluorescent dye selected from the group consisting of coumarins, quinacridones, and aromatic hydrocarbon fluorescent dyes and wherein said fluorescent dye is present in an amount of from about 10^{-3} to about 10 mole percent based on the moles of said light emitting layer material.

Claim 33 has been cancelled.

35. (Amended) An electroluminescent device comprised of an anode, a cathode, and a triazine compound of the formula



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wherein A is a monovalent aromatic group or a multivalent aromatic group which contains from about 2 to about 15 two conjugate-linked or from about 2 to about 15 fused aromatic rings; Ar^1 and Ar^2 are each independently aryl or aliphatic; and m represents the number of repeating segments and is a number of from 1 to about 4, and wherein said triazine functions as an electron transport, an electron injector, or simultaneously as an electron transport and an electron injector and further containing a light emitting layer situated between the hole transport layer and the electron transport layer wherein the light emitting layer contains a fluorescent dye selected from the group consisting of coumarins, quinacridones, and aromatic hydrocarbon fluorescent dyes and wherein said fluorescent dye is present in an amount of from about 10^{-3} to about 10 mole percent based on the moles of said light emitting layer material.

36. (Amended) An organic electroluminescent device in accordance with **claim 29** wherein said anode is of a thickness of from about [30] 90 to about 100 nanometers, said buffer layer is of a thickness of from about [10] 90 to about 100 nanometers, said hole transport is of a thickness of from about 5 to about 100 nanometers, said triazine electron transport layer is of a thickness of from about 10 to about 100 nanometers, and said cathode is of a thickness of from about 50 to about 500 nanometers, and wherein said low work function metal is from about 2 to about 4 electron volts, and wherein Ar^1 and Ar^2 are each independently aryl.